



TREE PRESERVATION REPORT FOR ZONING BY-LAW AMENDMENT

**539 & 543 TOPPING LANE
LONDON, ONTARIO**

Report prepared by
Ron Koudys Landscape Architects Inc

April, 2024

RKLA Project #24-110



Kathleen Garrett
ON-3009A

CONTENTS

1.0	Introduction and Executive Summary	1
1.1	Introduction	1
1.2	Executive Summary	1
1.2.1	Tree Species Composition Chart.....	1
1.2.2	Tree Removal and Preservation Recommendations	2
2.0	Subject Site and Scope of Work	2
3.0	Methodology.....	3
3.1	Health Assessment.....	3
3.2	Critical Root Zones	4
4.0	Tree Inventory and Preservation/Removal Recommendations	4
4.1	Tree Data Table.....	4
5.0	Potential Construction Impacts on Trees	7
5.1	Soil Compaction.....	7
5.2	Root Loss.....	7
5.3	Grade Changes	8
5.4	Mechanical Damage.....	8
5.5	Changes to Exposure - Sun and Wind	8
5.6	Soil Contamination.....	8
5.7	Water Availability	8
6.0	Construction Impact Mitigation Recommendations	9
6.1	Pre-construction recommendations	9
6.2	Recommendations related to the construction process	9
6.3	Post-construction recommendations	10
7.0	Disclaimer	10
8.0	Contact Information.....	10
9.0	Appendix A - Tree Preservation Drawings.....	12

1.0 INTRODUCTION AND EXECUTIVE SUMMARY

1.1 INTRODUCTION

Ron Koudys Landscape Architects Inc. (RKLA) was retained by the developer to prepare a tree assessment report in conjunction with the proposed development at 539 & 543 Topping Lane, London. The intent of this report is to summarize the findings of the tree assessment and make recommendations regarding tree preservation and removal based on tree health, the current site plan, and anticipated site grading for the purpose of application for rezoning.

Note that refinement of these recommendations will be made upon design refinement at the time of application for site plan approval.

1.2 EXECUTIVE SUMMARY

The inventory captured 30 individual trees and 3 vegetation units. Trees were identified within the subject site, and within 3 meters of the legal property boundary. No species classified as endangered or threatened under the Ontario Endangered Species Act, 2007, S.O. 2007, c. 6 were observed during the tree inventory. All trees observed are common to the current land uses and can be characterized as anthropogenic or opportunistic.

1.2.1 TREE SPECIES COMPOSITION CHART

The following chart summarizes the amount of each tree species observed.

%	Qty.	Botanical Name	Common Name
23%	7	<i>Acer platanoides</i>	Norway Maple
10%	3	<i>Gleditsia triacanthos</i>	Honey Locust
7%	2	<i>Acer saccharinum</i>	Silver Maple
7%	2	<i>Acer saccharum</i>	Sugar Maple
7%	2	<i>Betula</i> spp.	Birch
7%	2	<i>Morus alba</i> 'Pendula'	Weeping White Mulberry
7%	2	<i>Picea abies</i>	Norway Spruce
7%	2	<i>Picea pungens</i>	Colorado Spruce
7%	2	<i>Thuja</i> spp.	Cedar
3%	1	<i>Aesculus hippocastanum</i>	Horse Chestnut
3%	1	<i>Celtis occidentalis</i>	Hackberry
3%	1	<i>Juniperus</i> spp.	Juniper
3%	1	<i>Pinus nigra</i>	Austrian Pine
3%	1	<i>Tsuga canadensis</i>	Canadian Hemlock
3%	1	<i>Ulmus</i> spp.	Elm
100%	30	Total	

1.2.2 TREE REMOVAL AND PRESERVATION RECOMMENDATIONS

- Preservation of 8 trees located beyond the subject site.
- Removal of 4 trees located on the City ROW of Eaton Park Drive and on the boundary of the subject site and the City ROW of Eaton Park Drive. Consent from the City of London required for removal.
- Removal of 1 vegetation unit from the subject site due to direct conflict with proposed parking.
- Preservation of 2 vegetation units located along the boundary of the subject site and 535 Topping Lane.
- Tree #'s 1-3 & 14-16 are in close proximity to proposed construction. Recommendation for preservation is required to be reviewed with civil plans at the time of Site Plan Approval.
- Follow pre, during, and post construction recommendations outlined in the Construction Impact Mitigation Recommendations in this report.

2.0 SUBJECT SITE AND SCOPE OF WORK

The subject site is located at 539 & 543 Topping Lane. The lots include two residential homes and associated structures in the rear property. The trees are generally located close to the property boundary and along the previous property boundary located between 539 and 543 Topping Lane. Multiple trees are located within the City ROW of Eaton Park Drive.

Refer to Figure 1 for scope of tree inventory.

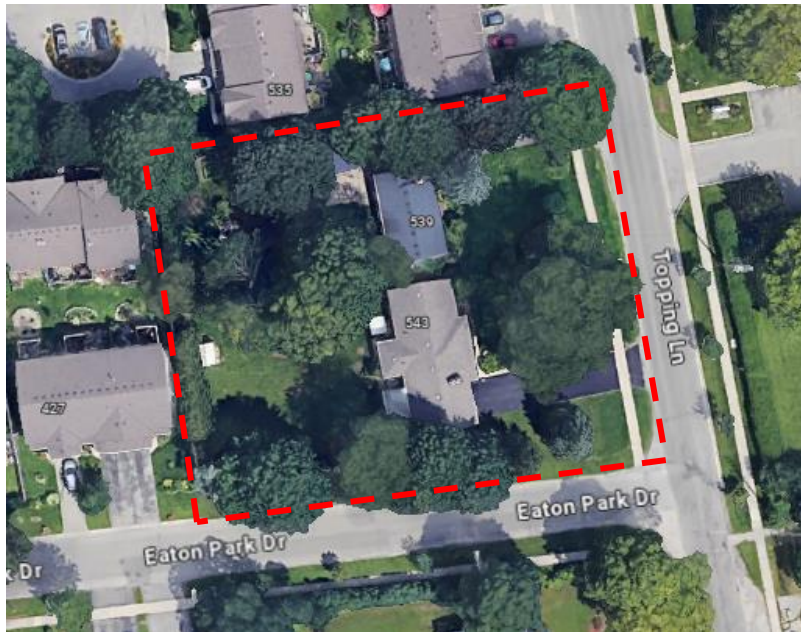


Figure 1 - City of London mapping with 2022 aerial imagery. NTS

Red dashed line - Limit of inventory



3.0 METHODOLOGY

Field work was completed on March 4th, 2024 by RKLA staff member Kathleen Garrett, ISA certified arborist ON 3009A. A topographic survey provided by Callon Dietz Inc. dated February 9th, 2024 was used as a base for the field work and determined tree location/ownership. Trees not located on the topographic survey have been located based on aerial imagery and approximate field measurements. All trees with a minimum DBH of 10cm within the given scope were identified and assessed. Groups of trees and hedges were identified and assessed as vegetation units, and include trees smaller than 10cm DBH. Each tree and vegetation unit was assigned a number which are identified in the tree data table and on the tree preservation plan. Tree identification numbers include 1-30 & veg unit 3.

The following information was recorded for each individual tree:

- Genus + specific epithet (Species)
- Diameter at breast height (DBH) (centimetres)
- Crown radius (metres)
- Crown Condition (overall general vigour of crown)
- Structural Form (excellent, good, fair, poor)
- Structural Integrity (good, fair, poor, hazard)
- General Comments

3.1 HEALTH ASSESSMENT

Trees were assessed following accepted arboricultural techniques and best practices using a limited visual inspection. The inspection included a 360-degree visual examination of the above-ground parts of each tree for structural defects including cavities, wounds, scars, external indicators of internal decay, evidence of insect presence, discoloured or deformed foliage, canopy and root distribution, and the overall condition of the tree. Evaluation of tree health was based on visible tree health indicators including live buds, foliage condition, deadwood, structural defects, form, and signs of disease or insect infestation. If needed, field observations were reviewed against available online imagery of the site to assist in determining tree canopy health. Quantified health assessments included in the inventory are explained here:

Crown Condition Assessment

- 5 Healthy: less than 10% crown decline
- 4 Slight decline: 11% - 30% crown decline
- 3 Moderate decline: 31% - 60% crown decline
- 2 Severe decline: 61% - 90% crown decline
- 1 Dead - No visible indication of living foliage or buds in crown

Structural Form Assessment

- Excellent: An ideal expression of a specific tree species, true to form, balanced canopy, good flare, typical internode length, full crown, etc.
- Good: A satisfactory and generally expected expression of a specific tree species, with only minor or typical variances from an ideal form.
- Fair: Nearly satisfactory, with defects or a combination of defects such as codominant leaders, unbalanced crown, poor/no flare, shortened internodes, has been poorly pruned, etc.
- Poor: Significantly flawed expression of a specific tree species

Structural Integrity Assessment

- Good: Defects if present are minor (e.g. twig dieback, small wounds); defective tree part is small (e.g. 5-8 cm diameter limb) providing little if any risk.
- Fair: Defects are numerous or significant (e.g. dead scaffold limbs); defective parts are moderate in size (e.g. limb greater than 5-8 cm in diameter).
- Poor: Defects are severe (trunk cavity in excess of 50%); defective parts are large (e.g. majority of crown).
- Hazard: Defects are severe and acute; defective part or collective defective parts render the tree a high risk threat to potential targets.

3.2 CRITICAL ROOT ZONES

The critical root zone of a tree is the portion of the root system that is the minimum necessary to maintain tree vitality and stability. Critical root zones are commonly prescribed by municipal bylaws based solely on DBH and/or drip line, and are typically expressed as a circular shape around the tree. There are a number of other factors, however, that are considered when establishing a critical root zone.

Factors that inform location and extent of a tree preservation barriers to protect the critical root zone include: species tolerance to root loss and other construction impacts (as established by authoritative resources and professional experience), tree trunk size (DBH), tree health and vigour, structural condition, landscape context, soil type, moisture availability, topography, ground cover, crown size (drip line) and balance, current physical root restrictions, visible root arrangement, relationship to neighbouring trees, relationship between tree and proposed construction, type of proposed construction, etc.

The City of London Tree Protection By-Law (C.P.-1555-252) defines the Critical Root Zone as “the area of land within a radius of ten (10) cm from the trunk of a tree for every one (1) cm of trunk diameter”. The Tree Preservation drawing graphically represents this radius for trees to be preserved.

4.0 TREE INVENTORY AND PRESERVATION/REMOVAL RECOMMENDATIONS

4.1 TREE DATA TABLE

The following recommendations are based on requirements of the current site plan. Grey indicates recommended removal.

GENERAL INFORMATION				SIZE		HEALTH & CONDITION				RECOMMENDATIONS		
ID #	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL FORM	STRUCTURAL INTEGRITY	COMMENTS	EXPECTED CONSTRUCTION IMPACTS	PRESERVE OR REMOVE	IMPACT MITIGATION / CONSENT REQUIREMENTS
1	<i>Picea pungens</i>	Colorado Spruce	City ROW Eaton Park Drive	34	3.5	4	Good	Good	North canopy dieback, branch to grade	minor expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier

Tree Preservation Report for zoning by-law amendment
539 & 543 Topping Lane London, Ontario

GENERAL INFORMATION				SIZE		HEALTH & CONDITION				RECOMMENDATIONS		
ID #	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL FORM	STRUCTURAL INTEGRITY	COMMENTS	EXPECTED CONSTRUCTION IMPACTS	PRESERVE OR REMOVE	IMPACT MITIGATION / CONSENT REQUIREMENTS
2	<i>Picea abies</i>	Norway Spruce	City ROW Eaton Park Drive	33	3	5	Good	Good	Limbed up 2 meters	minor expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
3	<i>Acer platanoides</i>	Norway Maple	City ROW Eaton Park Drive	38	4.5	5	Fair	Good	Cavities forming in old prune wounds	minor expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
4	<i>Acer platanoides</i>	Norway Maple	Boundary - subject site and Eaton Park Drive	59	6	5	Fair	Fair	DBH taken below primary union, cracks in primary union and bark	conflict with proposed driveway	remove	Consent from the City of London required
5	<i>Pinus nigra</i>	Austrian Pine	City ROW Eaton Park Drive	29	4	4	Fair	Fair	Canopy heavy south, lean in trunk, old prune wounds	conflict with proposed driveway	remove	Consent from the City of London required
6	<i>Acer platanoides</i>	Norway Maple	City ROW Eaton Park Drive	57	5.5	4	Fair	Fair	Exposed roots, deadwood, epicormic growth, prune wounds	conflict with proposed building and critical root zone	remove	Consent from the City of London required
7	<i>Acer platanoides</i>	Norway Maple	Boundary - subject site and Eaton Park Drive	34	5.5	4	Poor	Fair	Major epicormic growth, cavities forming, rubbing branches	conflict with proposed building and critical root zone	remove	Consent from the City of London required
8	<i>Morus alba 'Pendula'</i>	Weeping White Mulberry	Subject site	19	1.5	5	Good	Good	Typical form	conflict with proposed building	remove	
9	<i>Gleditsia triacanthos</i>	Honey Locust	Subject site	89	7.5	5	Fair	Fair	Low primary union, minor cavities in branches	conflict with proposed building	remove	
10	<i>Tsuga canadensis</i>	Canadian Hemlock	Subject site	~40	5	5	Fair	Fair	DBH approximated due to ivy on trunk, dead lowers, suppressed by tree #9	conflict with proposed building	remove	
11	<i>Morus alba 'Pendula'</i>	Weeping White Mulberry	Subject site	13	1.5	5	Good	Good	Typical form	conflict with proposed building	remove	
12	<i>Picea pungens</i>	Colorado Spruce	Subject site	46	3	4	Fair	Good	Dead lowers, limbed up 4 meters	conflict with proposed building	remove	
13	<i>Gleditsia tiracanthos</i>	Honey Locust	City ROW Topping Lane	52	6	4	Fair	Fair	Deadwood, lean south, bark peeling	minor expected impacts to critical root zone	preserve	tree protection barrier
14	<i>Acer platanoides</i>	Norway Maple	535 Topping Lane	42	4	5	Fair	Good	Minor epicormic growth, canopy heavy south	expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier

Tree Preservation Report for zoning by-law amendment
539 & 543 Topping Lane London, Ontario

GENERAL INFORMATION				SIZE		HEALTH & CONDITION				RECOMMENDATIONS		
ID #	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL FORM	STRUCTURAL INTEGRITY	COMMENTS	EXPECTED CONSTRUCTION IMPACTS	PRESERVE OR REMOVE	IMPACT MITIGATION / CONSENT REQUIREMENTS
15	<i>Acer platanoides</i>	Norway Maple	535 Topping Lane	-40	4	5	Fair	Good	DBH approximated due to limited access from board fence, minor deadwood, low primary union	expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
16	<i>Aesculus hippocastanum</i>	Horsechestnut	535 Topping Lane	-30	3	4	Fair	Fair	DBH approximated due to limited access from board fence, canopy heavy south, crooked leader	expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
17	<i>Acer platanoides</i>	Norway Maple	Subject site	-60	7	5	Fair	Fair	DBH approximated due to play structure constructed around tree, low primary union, deadwood in major limbs	direct conflict with proposed parking	remove	
18	<i>Acer saccharinum</i>	Silver Maple	Boundary - subject site and 535 Topping Lane	-65	5	5	Fair	Fair	Low primary union, minor deadwood	minor expected impacts to critical root zone	preserve	tree protection barrier
19	<i>Celtis occidentalis</i>	Hackberry	Subject site	13	2	5	Fair	Good	Crooked trunk, suppressed	direct conflict with proposed parking	remove	
20	<i>Betula</i> spp.	Birch	Subject site	31	4	5	Good	Good		direct conflict with proposed parking	remove	
21	<i>Picea abies</i>	Norway Spruce	Subject site	21	3	4	Fair	Good	Sparse, gall present	direct conflict with proposed parking	remove	
22	<i>Thuja</i> spp.	Cedar	Subject site	17	2	5	Fair	Good	Codominant	direct conflict with proposed parking	remove	
23	<i>Thuja</i> spp.	Cedar	Subject site	11	1.5	5	Poor	Fair	Old shoots with cavities, straggly	direct conflict with proposed parking	remove	
24	<i>Acer saccharinum</i>	Silver Maple	Subject site	55, 50	6.5	3	Poor	Poor	Codominant, major split in stems, major stem snapped off, cavities present, peeling bark	direct conflict with proposed parking	remove	
25	<i>Juniperus</i> spp.	Juniper	Subject site	10	1.5	4	Poor	Fair	Straggly form, deadwood	direct conflict with proposed parking	remove	
26	<i>Acer saccharum</i>	Sugar Maple	Subject site	56	6	4	Fair	Fair	Epicormic growth, deadwood, low primary union	direct conflict with proposed parking	remove	
27	<i>Acer saccharum</i>	Sugar Maple	Subject site	64	6	5	Fair	Fair	Lean east, epicormic growth, deadwood, low primary union	direct conflict with proposed parking	remove	
28	<i>Betula</i> spp.	Birch	Subject site	27, 23	4	5	Fair	Fair	Codominant low primary union, old prune wounds, included bark	direct conflict with proposed parking	remove	

GENERAL INFORMATION				SIZE		HEALTH & CONDITION				RECOMMENDATIONS		
ID #	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CANOPY RADIUS (m)	CROWN CONDITION	STRUCTURAL FORM	STRUCTURAL INTEGRITY	COMMENTS	EXPECTED CONSTRUCTION IMPACTS	PRESERVE OR REMOVE	IMPACT MITIGATION / CONSENT REQUIREMENTS
29	<i>Gleditsia triacanthos</i>	Honey Locust	Subject site	50	6	4	Poor	Poor	Large open seam from base to primary union, prune wounds	direct conflict with proposed parking	remove	
30	<i>Ulmus</i> spp.	Elm	Subject site	24	4	2	Poor	Poor	Major limbs removed, cavities forming, epicormic growth, least east	minor conflict with critical root zone and poor tree condition	remove	
VEG UNIT 1	<i>Thuja</i> spp.	Cedar	Boundary - subject site and 535 Topping Lane	5-10	1	5	Good	Good	Dense, approximate 19 individuals	minor conflict with critical root zone	preserve	tree protection barrier
VEG UNIT 2	<i>Thuja</i> spp.	Cedar	Boundary - subject site and 535 Topping Lane	5-10	1.5	3-5	Fair	Good	Some parts of hedge sparse, lower part of hedge is hidden from view by existing wood fence	minor conflict with critical root zone	preserve	tree protection barrier
VEG UNIT 3	<i>Thuja</i> spp.	Cedar	Subject Site	5-15	2	3-5	Fair	Good	Branched to grade, approximately 22 individuals, suppressed behind shed	conflict with proposed construction	remove	

5.0 POTENTIAL CONSTRUCTION IMPACTS ON TREES

Some trees have been recommended for removal due to direct conflict with the proposed development. Some trees that have been recommended for preservation may be in proximity to the proposed construction. Trees to be preserved may be affected by the construction process, or by the construction itself. It is imperative that the design team and the construction crew understand the potential for, and the causes of tree damage. Trees recommended for preservation may experience some or all of the following potential construction impacts. Strategies and methods to avoid these impacts are outlined in the Construction Impact Mitigation Recommendations section of this report.

5.1 SOIL COMPACTION

Soil compaction is caused by heavy or repeated compression or vibration of the soil around the tree. Soil compaction reduces the amount and size of macro and micro pore space that is vital for subsurface movement of air and water. The harmful effects of soil compaction include, but are not limited to: slower water infiltration, poor aeration, reduced root growth and an overall increased susceptibility to biotic and abiotic stressors.

5.2 ROOT LOSS

Root loss occurs when roots are severed. The majority of roots are typically located within the top 60cm of soil and can extend outward up to three times the extent of the tree drip line. Excavation of any kind within the critical root zone* can sever roots. Two categories of roots need to be considered when evaluating impacts of root loss -

small, fibrous absorbing roots, and large structural roots. Significant loss of either or both of these functions can cause stress and/or affect the structural stability of the tree. Note, however, that it is commonly accepted that healthy trees can typically tolerate and recover from the removal of approximately 33% (up to a maximum of 50%) of their root mass. Thorough consideration regarding extent of acceptable root removal is dependent on individual species characteristics, root loss distribution, and site specific conditions (ref. *Trees and Development: A Technical Guide to Preservation of Trees During Land Development* by Nelda Matheny and James R. Clark, 1998. Pg 72).

* Refer to ‘Critical Root Zones’ in this report for definition.

5.3 GRADE CHANGES

Lowering of the grade around trees has immediate and long term effects on trees. Lowering of grade requires immediate root loss from cutting the roots which results in water stress from the root removal and potential reduced structural stability.

Raising the grade around a tree can be equally damaging. The addition of fill over the root zone of a tree alters the roots’ ability for normal water and gas exchange that is necessary for healthy root growth and stability. Fill essentially suffocates the roots and can lead to the slow and eventual decline of the tree.

5.4 MECHANICAL DAMAGE

Mechanical damage is caused by physical contact with a tree that damages the tree to any degree. During land development and construction activities, there is an increased risk of both minor and fatal mechanical damage to trees from construction equipment. Minor damage can create entry points for insects and pathogens, and fatal damage can cause irreparable structural damage.

5.5 CHANGES TO EXPOSURE - SUN AND WIND

Trees can be negatively affected by increased exposure to sun or wind when neighbouring trees are removed. This can be of particular concern when ‘interior trees’ (trees that have developed surrounded by other trees) are suddenly exposed to forest edge conditions. These trees may experience higher intensity of direct sunlight resulting in leaf scald, and instability due to increased wind and snow loads.

Trees can be negatively affected by decreased exposure to sunlight. Proposed development that includes tall buildings located to the south and west of mature existing trees can greatly reduce the amount of daily direct sunlight. While this change in environment may not cause the immediate or eventual death of a tree, it can certainly slow development and alter growing habits and patterns, and must therefore be a consideration when evaluating trees for potential preservation.

5.6 SOIL CONTAMINATION

Soil health around a tree can be compromised by contamination from spills or leaks of fuels, solvents, or other construction related fluids.

5.7 WATER AVAILABILITY

Grading and servicing requirements for development can affect water availability for trees. Trees may experience a loss of available water due to a lowered water table or the capture or redirection of subsurface and/or overland flow. Conversely, trees may experience an increase of available water due to changes in site grading and storm water retention efforts.

The successful survival of the trees to be preserved is largely dependent on adhering to the construction impact mitigation recommendations that follow.

6.0 CONSTRUCTION IMPACT MITIGATION RECOMMENDATIONS

The following general recommendations are provided to guide the removal process, mitigate construction impacts, and ensure compliance with provincial, federal, and municipal regulatory requirements. Some of the recommendations listed below are noted to be undertaken by an ISA certified arborist.

6.1 PRE-CONSTRUCTION RECOMMENDATIONS

- a) Prior to any construction activity, tree preservation fencing is to be installed as per the attached tree preservation drawings and detail.
- b) Trees approved for removal are to be clearly indicated in the field (marked with spray paint or other agreed upon method) by the project arborist or landscape architect prior to any tree removal operations. All removals to be undertaken by an ISA certified arborist.
- c) In accordance with the Migratory Birds Convention Act, 1994, all removals must take place between September 1st and March 31st to avoid disturbing nesting migratory birds. If tree removal occurs between April 1st and August 31st, a biologist is required to complete a search for nests. Once cleared, the contractor has 48 hours to remove. If removal does not occur within 48 hours, another search will be required.
- d) Care should be taken during the felling operation to avoid damaging the branches, stems, trunks, and roots of nearby trees to be preserved. Where possible, all trees are to be felled towards the construction zone to minimize impacts on adjacent vegetation. All removals to be undertaken by an ISA certified arborist.
- e) It is recommended that the existing ground-layer vegetation at the base of trees to be preserved remain intact within the critical root zone so as not to disturb the soil around the base of the existing trees.
- f) Final site grading plans should ensure that the existing soil moisture conditions are maintained.

6.2 RECOMMENDATIONS RELATED TO THE CONSTRUCTION PROCESS

- a) Tree preservation fencing is to be maintained in good condition and effective for the duration of construction until all construction activity is complete or as per the project arborist or landscape architect.
- b) Tree preservation fencing is to remain intact as per the tree preservation drawings, and can only be temporarily removed with the express written consent from the project arborist or landscape architect. Should tree preservation fencing be temporarily relocated or moved, it is to be reinstated as per the tree preservation plans as soon as possible.
- c) No construction, excavation, adding of fill, stockpiling of construction material, or heavy equipment is permitted within the critical root zone/within the tree preservation fencing.
- d) When excavation near a tree is required, and it is anticipated that roots will be severed and exposed, duration of exposure is to be minimized to prevent root desiccation.

- e) During the excavation process, roots 25mm or larger that are severed and exposed should be hand pruned to leave a clean-cut surface. To be undertaken by an ISA certified arborist. Exposed severed roots that cannot be covered in soil on the same day as the cuts are made are to be kept moist. Exposed roots are to be kept moist by covering them with water soaked burlap or any other means available to prevent them from drying out.
- f) Avoid idling heavy equipment under or within close proximity to trees to be preserved to prevent canopy damage from exposure to the heat of the exhaust.
- g) Broken branches on trees within the subject site to be preserved should be cleanly cut as soon as possible after the damage has occurred. To be undertaken by an ISA certified arborist.

6.3 POST-CONSTRUCTION RECOMMENDATIONS

- a) Avoid discharging rain water leaders adjacent to retained trees, as this may result in an overly moist environment which can cause root rot.
- b) After all work is completed, tree preservation fences and any other impact mitigation paraphernalia must be removed.
- c) A final review must be undertaken by the project arborist or landscape architect to ensure that all mitigation measures as described above have been met.

7.0 DISCLAIMER

The assessment of the trees presented within this report has been made using accepted arboricultural techniques. These include a visual examination of the above-ground parts of each tree for structural defects, scars, external indications of decay, evidence of insect presence, discoloured foliage, the general condition of the trees and the surrounding site, as well as the proximity of property and people. None of the trees examined were dissected, cored, probed, or climbed, and detailed root crown examinations involving excavation were not undertaken.

Notwithstanding the recommendations and conclusions made in this report, it must be realized that trees are living organisms and their health and vigour is constantly changing. They are not immune to changes in site conditions or seasonal variations in the weather.

While reasonable efforts have been made to ensure the trees recommended for retention are healthy, no guarantees are offered or implied, that these trees or any part of them will remain standing.

Note that this arborist report has been prepared using the latest drawings and information provided by the client. Any subsequent design or site plan changes affecting trees may require revisions to this report. Any new information or drawings are to be provided to RKLA prior to report submission to planning authorities.

8.0 CONTACT INFORMATION

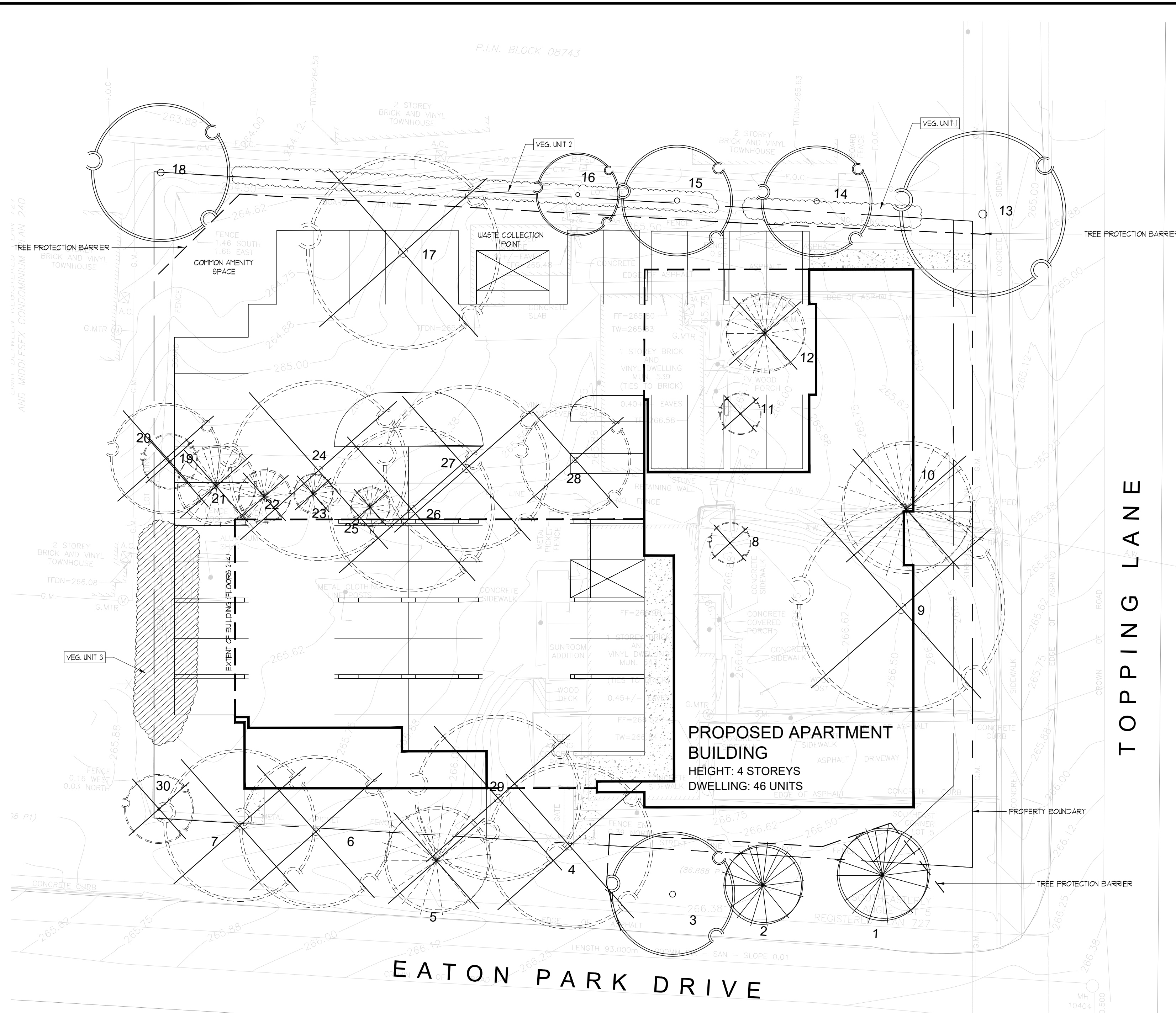
Office:
Ron Koudys Landscape Architects Inc.
368 Oxford Street East
London, Ontario
N6A 1V7

Ph: 519-667-3322
Fax: 519-645-2474

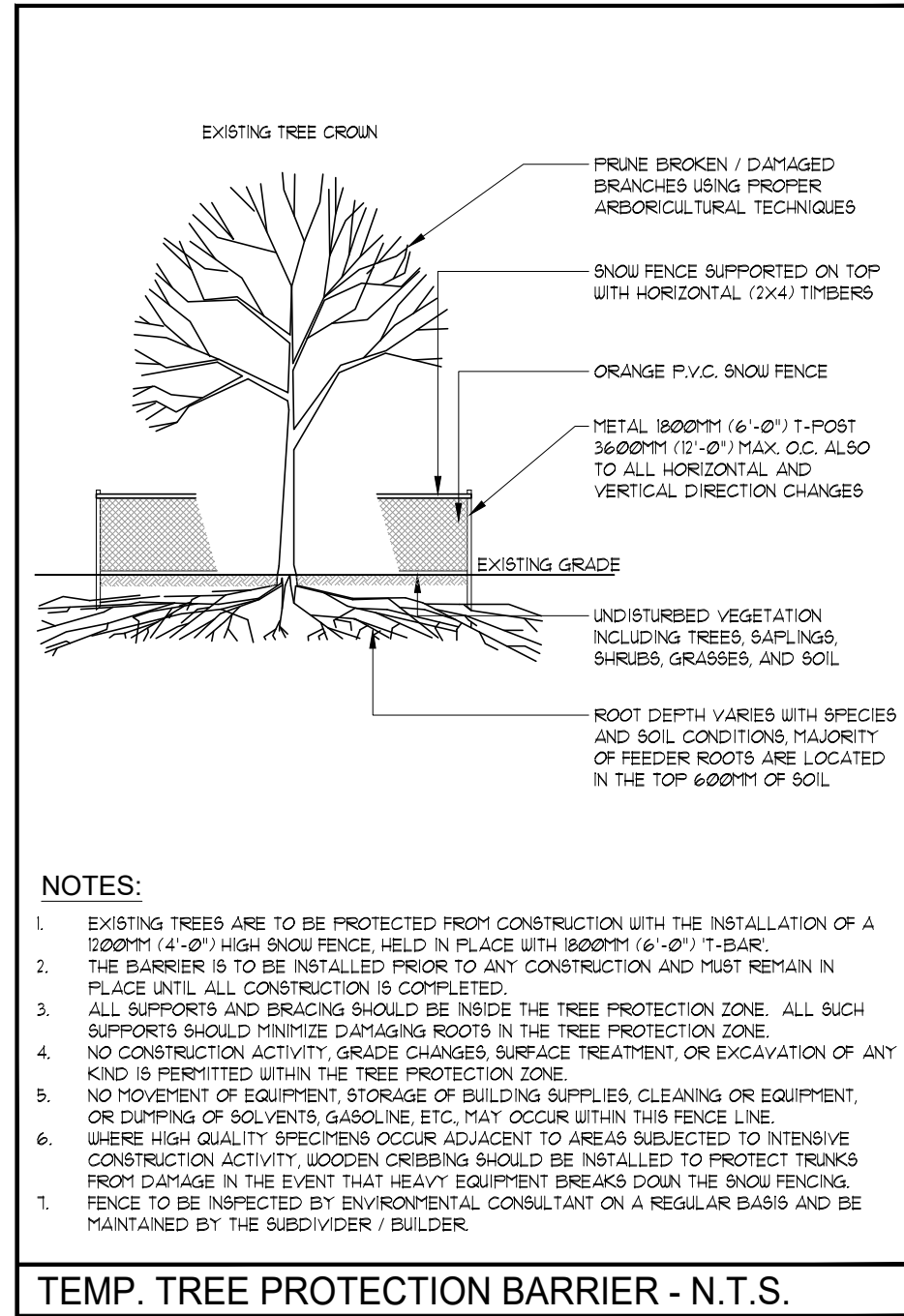
Staff:

Field work and report author:
Kathleen Garrett, ISA Certified Arborist ON-3009A - katie@rkla.ca

9.0 APPENDIX A - TREE PRESERVATION DRAWINGS



TREE PRESERVATION PLAN
SCALE = 1:200



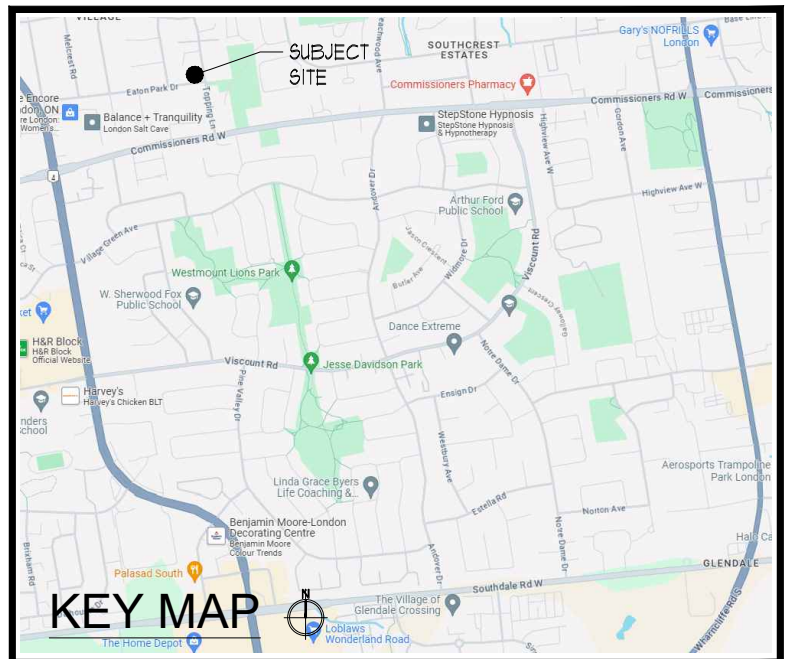
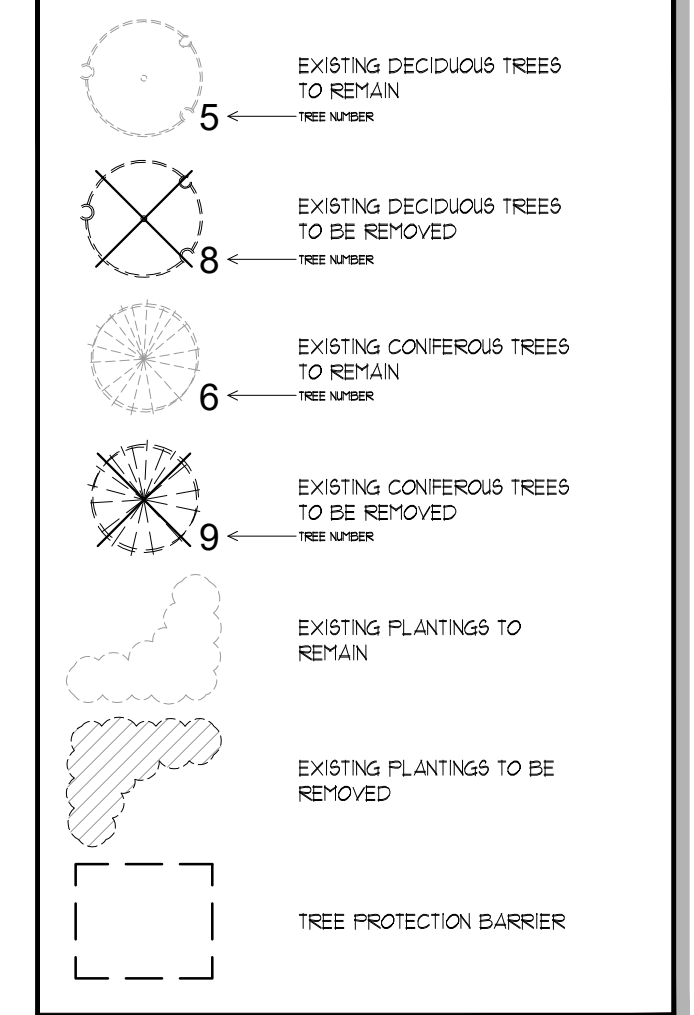
TREES TO BE PRESERVED

ID #	GENERAL INFORMATION			SIZE		HEALTH & CONDITION		RECOMMENDATIONS			
	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CROWN RADIIUS (cm)	STRUCTURAL DBH	STRUCTURAL INTEGRITY	COMMENTS	EXPECTED CONSTRUCTION IMPACTS	PRESERVE OR REMOVE	IMPACT MITIGATION / CONSENT REQUIREMENTS
1	<i>Picea canadensis</i>	Colorado Spruce	City ROW Eaton Park Drive	34	3.5	4	Good	North canopy dieback, branch to grade	minor expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
2	<i>Picea canadensis</i>	Norway Spruce	City ROW Eaton Park Drive	33	3	5	Good	Limbed up 2 meters	minor expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
3	<i>Acer platanoides</i>	Norway Maple	City ROW Eaton Park Drive	38	4.5	5	Fair	Cavities forming in old prune wounds	minor expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
13	<i>Gleditsia triacanthos</i>	Honey Locust	City ROW Topping Lane	52	8	4	Fair	Deadwood, lean south, bark peeling	minor expected impacts to critical root zone	preserve	tree protection barrier
14	<i>Acer platanoides</i>	Norway Maple	535 Topping Lane	42	4	5	Fair	Minor epicormic growth, canopy heavy south	expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
15	<i>Acer platanoides</i>	Norway Maple	535 Topping Lane	40	4	5	Fair	DBH approximated due to limited access from board fence, minor deadwood, low primary union	expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
16	<i>Alnus incana</i>	Horseshoe Nut	535 Topping Lane	30	3	4	Fair	DBH approximated due to limited access from board fence, canopy heavy south, crooked leader	expected impacts to critical root zone, to be reviewed with civil plans at the time of SPA	preserve	tree protection barrier
18	<i>Acer saccharinum</i>	Silver Maple	Boundary - subject site and 535 Topping Lane	65	5	5	Fair	Low primary union, minor deadwood	minor expected impacts to critical root zone	preserve	tree protection barrier
VEG UNIT 1	<i>Thuja sp.</i>	Cedar	Boundary - subject site and 535 Topping Lane	5-10	1	5	Good	Dense, approximate 19 individuals	minor conflict with critical root zone	preserve	tree protection barrier
VEG UNIT 2	<i>Thuja sp.</i>	Cedar	Boundary - subject site and 535 Topping Lane	5-10	1.5	5	Fair	Some parts of hedge sparse, lower part of hedge is hidden from view by existing wood fence	minor conflict with critical root zone	preserve	tree protection barrier

TREES TO BE REMOVED

ID #	GENERAL INFORMATION			SIZE		HEALTH & CONDITION		RECOMMENDATIONS			
	BOTANICAL NAME	COMMON NAME	LOCATION	DBH (cm)	CROWN RADIIUS (cm)	STRUCTURAL DBH	STRUCTURAL INTEGRITY	COMMENTS	EXPECTED CONSTRUCTION IMPACTS	PRESERVE OR REMOVE	IMPACT MITIGATION / CONSENT REQUIREMENTS
4	<i>Acer platanoides</i>	Norway Maple	Boundary - subject site and Eaton Park Drive	59	6	5	Fair	DBH taken below primary union, cracks in primary union and bark	conflict with proposed driveway	remove	Consent from the City of London required
5	<i>Pinus nigra</i>	Austrian Pine	City ROW Eaton Park Drive	29	4	4	Fair	Canopy heavy south, lean in trunk, old prune wounds	conflict with proposed driveway	remove	Consent from the City of London required
6	<i>Acer platanoides</i>	Norway Maple	City ROW Eaton Park Drive	57	5.5	4	Fair	Exposed roots, deadwood, epicormic growth, prune wounds	conflict with proposed building and critical root zone	remove	Consent from the City of London required
7	<i>Acer platanoides</i>	Norway Maple	Boundary - subject site and Eaton Park Drive	34	5.5	4	Poor	Major epicormic growth, cavities forming, rubbing branches	conflict with proposed building and critical root zone	remove	Consent from the City of London required
8	<i>Morus alba</i>	Weeping White Mulberry	Subject site	19	15	5	Good	Typical form	conflict with proposed building	remove	
9	<i>Gleditsia triacanthos</i>	Honey Locust	Subject site	89	3.5	5	Fair	Low primary union, minor cavities in branches	conflict with proposed building	remove	
10	<i>Thuja occidentalis</i>	Canadian Hemlock	Subject site	40	5	5	Fair	DBH approximated due to lay on trunk, dead lower, suppressed by tree #9	conflict with proposed building	remove	
11	<i>Morus alba</i>	Weeping White Mulberry	Subject site	15	15	5	Good	Typical form	conflict with proposed building	remove	
12	<i>Picea canadensis</i>	Colorado Spruce	Subject site	46	3	4	Fair	Dead lower, limbed up 4 meters	conflict with proposed building	remove	
17	<i>Acer platanoides</i>	Norway Maple	Subject site	60	7	5	Fair	DBH approximated due to play structure constructed around tree, low primary union, deadwood in major limbs	direct conflict with proposed parking	remove	
19	<i>Celtis occidentalis</i>	Hickberry	Subject site	12	2	5	Fair	Cracked trunk, suppressed	direct conflict with proposed parking	remove	
20	<i>Betula sp.</i>	Birch	Subject site	31	4	5	Good	Good	direct conflict with proposed parking	remove	
21	<i>Picea canadensis</i>	Norway Spruce	Subject site	21	3	4	GOOD	Sparsely, gall present	direct conflict with proposed parking	remove	
22	<i>Thuja sp.</i>	Cedar	Subject site	12	2	5	Fair	Good	direct conflict with proposed parking	remove	
23	<i>Thuja sp.</i>	Cedar	Subject site	11	1.5	5	Poor	Low primary union, deadwood, low primary union	direct conflict with proposed parking	remove	
24	<i>Acer saccharinum</i>	Silver Maple	Subject site	55, 50	6.5	3	Poor	Limbed up, major split in stems, major stem snapped off, cavities present, peeling bark	direct conflict with proposed parking	remove	
25	<i>Juniperus sp.</i>	Juniper	Subject site	10	1.5	4	Poor	Straggly form, deadwood	direct conflict with proposed parking	remove	
26	<i>Acer saccharum</i>	Sugar Maple	Subject site	56	6	4	Fair	Epicormic growth, deadwood, low primary union	direct conflict with proposed parking	remove	
27	<i>Acer saccharum</i>	Sugar Maple	Subject site	64	6	5	Fair	Lean east, epicormic growth, deadwood, low primary union	direct conflict with proposed parking	remove	
28	<i>Betula sp.</i>	Birch	Subject site	17, 23	4	5	Fair	Limbed up low primary union, old prune wounds, included bark	direct conflict with proposed parking	remove	
29	<i>Gleditsia triacanthos</i>	Honey Locust	Subject site	50	6	4	Poor	Large open seam from base to primary union, prune wounds	direct conflict with proposed parking	remove	
30	<i>Ulmus sp.</i>	Elm	Subject site	24	4	2	Poor	Major limbs removed, cavities forming, epicormic growth, lead lost	minor conflict with critical root zone and poor tree condition	remove	
VEG UNIT 3	<i>Thuja sp.</i>	Cedar	Subject Site	5-5	2	3.5	Fair	Stemmed to grade, approximately 22 individuals, suppressed behind shed	conflict with proposed construction	remove	

LEGEND



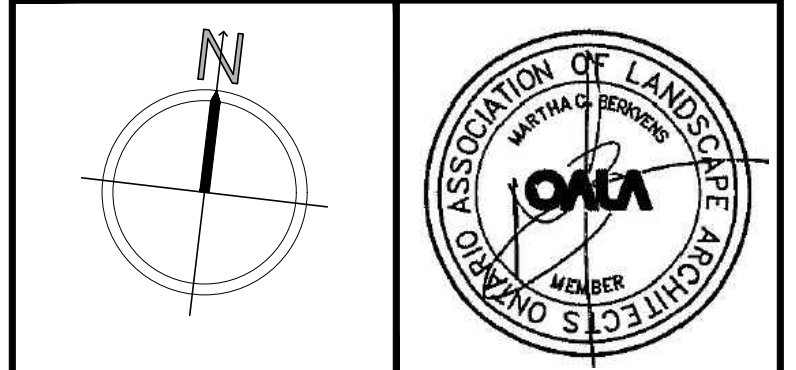
ALL DRAWINGS REMAIN THE PROPERTY OF THE LANDSCAPE ARCHITECT AND SHALL NOT BE REPRODUCED OR REUSED WITHOUT THE LANDSCAPE ARCHITECT'S WRITTEN PERMISSION.

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION OR TENDER PURPOSES UNLESS SIGNED AND DATED BY MARTHA BERKOVENS, O.A.L.A. C.S.L.A. LANDSCAPE ARCHITECT, LONDON, ONTARIO (519) 667-3322.

Martha Berkovens, O.A.L.A. C.S.L.A. DATE

2024-04-04	ISSUED FOR ZBA	2.
2024-03-21	ISSUED FOR REVIEW	L
DATE	DESCRIPTION	No.

PLOTTING INFORMATION:
PLOTTED DATE: 2024-04-04
PLOTTED SCALE: 1:1



PROJECT TITLE:
PROPOSED APARTMENT BUILDING
TOPPING LANE & EATON PARK DRIVE
LONDON, ONTARIO

DRAWING TITLE:
TREE PRESERVATION PLAN

DATE: MARCH 2024	SCALE: AS NOTED	DRAWING No. T-1
DRAWN: RKL/A Inc.	CHECKED BY: M.C.B.	
PROJECT No. 24-110Lc		